

CLAIMS

1. Method for controlling a first robot (1) and at least one other robot (2), the at least one other robot (2) being calibrated relative to the first robot by the determination of at least one coordinate transformation (SF1-2) of the first robot relative to at least one other robot and said at least one transformation (SF1-2) is stored in a control device (2.1) of the other robot, wherein also the first robot (1) is calibrated relative to the other robot (2) by the determination of at least one independent coordinate transformation (SF2-1) and said at least one independent transformation (SF2-1) is stored in a control device of the first robot.
2. Method according to claim 1, wherein in the case of at least three robots, each robot is calibrated relative to the others by at least one independent determination of coordinate transformations and the at least one transformation of the calibration of each robot is stored in a control device thereof.
3. Method according to claim 1, wherein for each robot several calibrations are performed each at different po-

sitions and the thus obtained transformations (SF2-1, SF1-2) are stored.

4. Method according to claims 1, wherein the calibrations
5 for each robot (1, 2) are performed at different positions.
5. Method according to claim 1, wherein in the case of
cooperative operation of at least two robots (1, 2),
10 the coordinates of the independent robot (1, 2) and the
coordinates transformed relative thereto (on the basis
of SF2-1 or SF1-2) of the independent robot or robots
(2, 1) are used.
- 15 6. Method according to claim 3, wherein in operating area-
dependent manner, the coordinates of one robot and the
coordinates of one or other robots transformed thereto
are used.
- 20 7. Method according to claim 1, wherein in the cooperative
operation of at least two robots (1, 2), as desired,
one (1, 2) of the robots is used as the independent robot
and the at least one other robot (2, 1) as a dependent
robot.
- 25 8. Method according to claim 7, wherein during an operating
process the characteristic of the robots (1, 2) as
an independent or dependent robot is changed.
- 30 9. System for controlling a first robot (1) and at least
one other robot (2) with at least one control means
(1.1, 2.1) with a device (2.2) for calibrating at least
one other robot (2) relative to the first robot (1) by
determining at least one coordinate transformation
35 (SF1-2) of the first robot (1) relative to the other

robot (2) and with a memory means (2.3) in the control device (2.1) of the other robot (2) for storing said at least one transformation (SF1-2), having determination means (1.2) for calibrating the first robot (1) relative to the other robot (2) by determining at least one independent coordinate transformation (SF2-1) of at least one other robot (2) relative to the first robot (1) and by a memory means (1.3) in a control device (1.1) of the first robot (1) for storing at least one independent transformation (SF2-1).

10. System according to claim 9, with at least three robots, wherein each of the robots (1, 2) in its control device (1.1, 1.2) has a means for its calibration (1.2, 1.2) relative to each of the other robots (2, 1) by determining at least one coordinate transformation (SF2-1, SF1-2) relative to each of the other robots (2, 1), as well as a memory means (1.3, 2.3) for storing the in each case at least one coordinate transformation (SF2-1, SF1-2).

11. System according to claim 9 designed for calibrating each robot (1, 2) by several transformations and for the storage of several such transformations.

12. System according to one of the claims 9 to 11, designed for calibrating the robots (1, 2) at different locations.

13. System according to claim 9, characterized by the use of the coordinates of an independent robot and the transformed coordinates of the at least one dependent robot during cooperative operation of at least two robots.

14. System according to claim 9, designed for using the coordinates of one robot and the coordinates of the other robot or robots transformed relative thereto in different areas of operation.

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15. System according to claim 9, designed for chooseable use of one robot as an independent robot and the at least one other robot as a dependent robot during cooperative operation of at the least two robots.

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16. System according to claim 15, designed for changing the characteristic of the robots as independent or dependent robots during an operating process.